

ABSTRACT OF THE DISCLOSURE

A low flow rotary separator includes a housing that defines a separator chamber and a liquid/gas mixture inlet. A shaft driven by a motor includes a plurality of disks in frictional contact with the mixture to drive the liquid outward against an inner wall of the separator and displace gas to a central region about the shaft. The liquid exits through a liquid outlet valve into a high-pressure storage container. The pressure of the liquid is increased to allow flow into the high-pressure storage container by a pump driven by the shaft. A level control valve closes in response to a predetermined pressure differential between liquid in the feed line and liquid within the separator chamber to allow liquid flow through an outlet check valve.